

## **REMARKS**

### **Status of Claims**

Claims 1-20, 41 and 42 are pending in this application and were examined.

This paper amends claims 1, 3, 4, 4, 8, 12, 15, 16, 41 and 42. Claims 48 is newly added. Following the current amendment, claims 1, 2-20, 41, 42 and 48 are pending and under examination.

### **Support for Amendments**

Support for the amendment to claims 1, 8, 12, 41 and 42 are found generally throughout the specification. Claims 3, 4, 6, 15, 16 and the specification are amended for grammatical reasons and to clarify the claimed subject matter. Support for new claims 48 is found in claim 13 as pending prior to the current amendment.

### **Claim Objections**

Claim 3 is objected to due to an informality. Applicant has amended the term “boned” to “bonded”. Applicant submits that the objection has been overcome.

### **Rejections Under 35 U.S.C. § 112**

Claims 4 through 7, and 10 through 20 are rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 has been amended to refer to the previous claim. Applicant submits that Claim 4 has been amended in such a manner as to overcome the indefiniteness issues raised by the Examiner. Claims 5 through 7 and 10 through 12 depend from claim 4 and thus Applicant submits that Claims 5 through 7 and 10 through 12 also overcome the rejection.

Claim 13 has been amended to clarify the ranges to clearly set forth the metes and bounds of the patent protection desired.

Claims 15 and 16 have also been amended to address the indefinite issues raised by the Examiner. Applicant has amended the specification at page 38, lines 1-9 to be consistent with

the amendment of claim 15. Applicant respectfully submits that the amendments overcome the rejections.

**Rejections Under 35 U.S.C. § 102(b)**

Claims 1 through 3, 8, 9, 13, 14 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Glasel et al WO Patent No. 2002/22052. The examiner is using U.S. Patent No. 6,720,072 to Hinterwaldner et al. ( "Hinterwaldner") as the English language equivalent of this document. Applicants traverse this rejection.

In order for a claim to be anticipated "[t]he identical invention must be shown in as complete detail as is contained in the claims." The present invention is directed to a cosmetic composition formed by a one step process, where the coating is a hybrid crosslinked coating that is formulated to have characteristics consistent with those required of a cosmetically suitable compound. The resulting cosmetic compound according to Applicant's disclosure shows increased hydrophobic as shown in Test 1 on page 27 of Applicant's specification. The cosmetic powder with hybrid coating shows increased pH stability and dispensability over traditional cosmetic compositions as shown in Test 2 and Test 3. Claim 1 has been amended to more clearly disclose cross linking that occurs during the coating process which creates the unique characteristics ideal for cosmetic compositions in Applicants claimed invention.

Hinterwaldner is directed toward a high-temperature polymerizable metal oxide particles with a core and at least one group including a reactive functional group. (see abstract of Hinterwaldner). A polymerizable metal oxide of this nature would not be suitable for cosmetic purposes as it is a reactive compound could not be used in cosmetics.

Claim 1 as amended requires crosslinked coating and chains of multiple siloxy metal units interconnected by oxygen atoms wherein the coated powder has no reactive functional groups. Hinterwaldner teaches "a metal oxide particle (powder) coated with a compound of the form -B-X." (Office Action, page 6). In this structure, X is a reactive functional group. (Col. 5, ll. 43-45). The functionality of the Hinterwaldner patent is reliant on the reactive functional group X. Without functional group X, Hinterwaldner would not be able to obtain the desired properties. Hinterwaldner focuses on a two step process to attach various compounds via the reactive functional group. In contrast, Applicant's claimed invention is directed to a process

where the organometallate units and the siloxy units crosslink and react together as opposed to being added one after the other. Thus, Hinterwalder does not disclose a crosslinked coating having chains of multiple siloxy metal units wherein the coated powder has no reactive functional groups. Claim 2 has been canceled and claim 3 depends from claim 1. Thus, Applicant submits that for the reasons states above, claims 1 and 3 have been amended to overcome the rejection.

Regarding claim 8, Applicant's invention requires a crosslinked coating that includes residues of a multifunctional organometallate compounds and a multifunctional silicon compound that are crosslinked. Hinterwaldner discloses that tetramethoxysilane can be added and also teaches in a different portion isopropyl triisosteroyl titanate. Hinterwaldner does not teach these not together as crosslinked. Also, Hinterwaldner teaches a two step process – not a one-step process that would result in the crosslinking of the two. Accordingly, Hinterwaldner does not teach all of the claimed limitations of Applicant's invention.

Regarding claim 9, Hinterwalder does not teach siloxy compounds that would be suitable to a cosmetic composition. One skilled in the art would not use the Hinterwaldner patent with a list of possible siloxy compounds to create a composition suitable for a cosmetic composition.

Claim 13 of Applicant's claimed invention requires that the unsatisfied valences are occupied by other units of formula (8), said other units being crosslinking units, by powder substrate atoms or groups, or by residual unreactive groups. The Examiner states that:

The two metals can be different, and if the first metal is Si and the second metal is Ti, this formula meets the stoichiometry of the instant claim. Further with  $x=3$ , the compound meets the structure of the instant claim with  $a=1$ . Hinterwaldner (column 2, lines 8 through 46) teaches that the free valences of Me can be binded to another group B via and oxygen atom or to the core particle or to alkyl groups (Column 5, line 33 through 37). (Office Action, page 8)

Hinterwaldner does not disclose that the unsatisfied valences are occupied by other units of formula as in Applicant's claimed invention, the other units are crosslinked units, by powder substrate atoms or groups, or by residual unreactive groups. Claim 14 depends from claim 13. Applicant submits that Hinterwalder does not disclose all of the limitations of claims 13 and 14.

Regarding claim 42, Applicant's claim 42 as amended requires that the powder is coated by a one-step process of providing a hybrid coating on cosmetic powder. Hinterwaldner is directed toward a one-step process that creates a core with an attached reactive functional group

which would not be suitable for cosmetic purposes. Hinterwaldner does not disclose a one-step process of providing a hybrid coating on a cosmetic powder.

For the reasons states above, Applicant submits that Hinterwaldner does not anticipate claims 1, 3, 8, 9, 13, 14 or 42. Applicant respectfully requests that the rejections be withdrawn.

**Rejections Under 35 U.S.C. § 102(b)/103(a)**

Claims 4 through 7, 10 through 12, 15 through 20 and 41 are rejected under 35 U.S.C. 102(b) or, in the alternative 35 U.S.C. 103(a) as obvious over Glasel (Hinterwaldner).

Claims 4 through 7 and claims 10 through 12 depend from amended claim 1. As discussed above claim 1, as amended requires a crosslinked coating and chains of multiple siloxy metal units interconnected by oxygen atoms wherein the coated powder has no reactive functional groups. Hinterwaldner teaches "a metal oxide particle (powder) coated with a compound of the form -B-X." (Office Action, page 6). In this structure X is a reactive functional group. (Col. 5, ll. 43-45). Hinterwalder does not disclose a crosslinked coating having chains of multiple siloxy metal units wherein the coated powder has no reactive functional groups. Furthermore, claim 12 requires crosslinking between the siloxy units and the organometallate residues. Hinterwalder states:

The reactive functional group is to be capable of entering into chemical reactions with other functional groups either already present in the particles or present externally in coreactants. In particular, it is to be able to enter into a polymerization . . . so that crosslinking and/or curing takes place. (Col 6, lines 2-5).

Hinterwaldner does not disclose crosslinking between siloxy units and organometallate residues. Moreover, Hinterwalder states that the reactive functional group is capable of crosslinking. The reactive functional group of Hinterwalder is not present in applicant's invention and is not suitable for cosmetic powder compositions.

Regarding claims 15 through 20, Applicant's invention requires coated cosmetic particles wherein the hydrophobic coating is covalently bonded to the cosmetic powder by satisfaction of available oxygen valences in the organometallate and siloxy units.

Hinterwaldner mentions cosmetic application in passing, however, Hinterwaldner does not disclose coated cosmetic particles. Likewise, Hinterwaldner does not disclose that a

hydrophobic coating is covalently bonded to a cosmetic powder by satisfaction of available oxygen valences in the organometallate and siloxy units. Hinterwalder mentions tetramethoxysilane and mentions isopropyl triisosteroyl titanate, but nowhere does it disclose the specific bonding of Applicant's claimed invention. Claims 16 through 20 depend from claim 15, and for the reasons stated above are not anticipated or made obvious by Hinterwaldner. Claim 15 requires that the hydrophobic coating includes polysiloxy units bonded to the powder through organometallate units. Hinterwaldner does not disclose polysiloxy units bonded through organometallate units.

Claim 41, has been amended to require a one-step process. This created the specific linking of Applicant's invention. Hinterwaldner attaches B-X in a one-step process, however, B-X still has reactivity, and requires a two step process to further react the functional reactive group X and obtain the product (see Col 9, lines 3-63). Accordingly, Hinterwaldner does not create the same hybrid coating as Applicant's claimed invention.

In order for a prior art reference to be properly used as the basis for an obviousness rejection, that reference must be either within the field of Applicants' invention (i.e., analogous art) or, if it is non-analogous art, the reference must be reasonably pertinent to the problem with which Applicant is concerned. Specifically, the Federal Circuit has held that:

In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.

In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also, In re Deminski, 796 F.2d 436, 230 U.S.P.Q. 313 (Fed. Cir. 1986); In re Clay, 966 F.2d 656, 23 USPQ2d 1058 (Fed. Cir. 1992); State Contracting & Engineering Corp. v. Condotte America, Inc. 346 F.3d 1057, 68 U.S.P.Q.2d 1481 (Fed. Cir. 2003).

Non-analogous art should only be considered when it is reasonably pertinent to the problem addressed by the invention. In this regard, the Federal Circuit has held that:

A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.

Thus, the purposes of both the invention and the prior art are important in determining whether the reference is reasonably pertinent to the problem the invention attempts to solve.

In re Clay, 966 F.2d 656, 659, 23 USPQ2d 1058 (Fed. Cir. 1992). See also, State Contracting & Engineering Corp. v. Condotte America, Inc. 346 F.3d 1057, 68 U.S.P.Q.2d 1481 (Fed. Cir. 2003).

The Hinterwaldner disclosure is in a different field from that of Applicants. The Hinterwaldner disclosure relates a high-temperature resistant polymerizable metal oxide particle with a reactive function group for coating material, molding materials and adhesive. This is clearly a different field of endeavor from Applicants' field of cosmetic products, rendering Hinterwaldner as non-analogous art. Applicant seeks to improve hydrophobicity, pH stability and dispersability, characteristics which Hinterwaldner is not concerned with.

Hinterwaldner does not commend attention because it is used for a different purpose and solves a different problem than the instant invention. Hinterwaldner aims at creating a product that may be further reacted. A product that may be further reacted could not be used and would not be safe or suitable for cosmetic applications.

In sum, the Hinterwaldner is in a different field, is used for a different purpose, and solves a different problem than Applicants' product as currently claimed. Thus, Hinterwaldner is non-analogous art and cannot be used to support an obviousness rejection. Applicants submit that all rejections based on Hinterwaldner should now be withdrawn and such action is respectfully requested.

**CONCLUSION**

Applicants submit that the claims are in condition for allowance, and such action is respectfully requested. If the Examiner should have any questions concerning this communication or feels that an interview would be helpful to expedite allowance of this case, the Examiner is requested to call Applicants' undersigned attorney.

Respectfully submitted,

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